

Assistant Professor

Specialty:  
Computational Sciences

Office Location:  
Dent 132

Office Telephone Number:  
504-816-4602

Email address:  
zxu@dillard.edu

Courses Taught:  
CS 150 Programming I  
CS 160 Programming II  
CS 230 UNIX Operating System  
CS 260 Data Structure  
CS 445 Artificial Intelligence  
CS 470 Analysis of Algorithm  
CS 350 Database Systems

Research and/or Teaching Interests:  
Computational Sciences  
Data Mining  
Artificial Intelligence  
Bio-Informatics

University Service:  
Curriculum Committee  
University Grant Committee

Professional Affiliations:  
ASME  
ACM

Selected Publications:  
1. Xu, Z.-J., Tran-Cong, S., Feng, Z. and Michaelides, E.E., School of Engineering and South-Central Regional Center of NIGEC, Tulane University, "Direct Numerical Simulations of Flows in Ecosystems using the Lattice Boltzmann Method", Reviewed by Agricultural and Forest Meteorology

2. Xu, Z.-J., Tran-Cong, S., Feng, Z. and Michaelides, E.E., School of Engineering and South-Central Regional Center of NIGEC, Tulane University, "The full governing and closure equations for the evaluation of Net Ecosystem Exchange (NEE)", Submitted to Bound-Layer Meteorol
3. Zhang, K., Xu, Z-J, Peng, J. and Buckles, B., "Empirical Comparison of Robustness of Probability Estimation Trees on Different Evaluation Metrics", In Proceeding of 5th International Conference on Data Mining (ICDM), November 2005, New Orleans, Louisiana (Accepted Ratio 22%).
4. Xu, Z-J, Buckles, B. and Zhang, K., "DNA Sequence Classification Using Support Vector Machine", In Proceedings of SCI, Orlando, July 2004.
5. Zhang, K., Xu, Z-J and Buckles, B., "Using Multimembered Evolution Strategies For Oblique Decision Tree Induction(ESODT)", In Proceedings of SPIE, Orlando, March, 2005.
6. Xu, Z-J and Michaelides, E., E., "Sedimentation of bidisperse suspension", Fluid Dynamic Research, 2005
7. Xu, Z-J and Michaelides, E., E., "The effect of particle interactions on the sedimentation process", International Journal of Multiphase Flow, vol. 29, pp. 959 – 982, 2003.
8. Xu, Z-J and Michaelides, E., E., "Non-Cohesive Particles Sediment in Inclined Vessels", Journal of chemical engineering communication, vol. 192, Number 4, pp. 532 – 549, 2005.
9. Michaelides, Efstathios E. and Xu, Z-J, "Lattice Boltzmann Simulation of the Sedimentation Process with Non-Cohesive Particles", proceedings of FLUID-PARTICLE INTERACTIONS VI, Italy, August 25-30, 2002.
10. Michaelides, E. E. and Xu, Z-J, "Particle interactions during sedimentation", 55th annual proceedings of American Physical Society, Dallas, November, 2002.
11. Xu, Z-J, Michaelides, E. E. and Nikitopoulos, D.E. "The influence of Large Scale Structures of an Axisymmetric Jet in the Evaporation of Droplets," APS-DFD annual meeting, New Orleans, November 1999.
12. Xu, Z-J and Meng, Y. "The experimental research on Cavitation in pump system", Journal of Fluid Machinery, 1998, January.
13. Xu, Z-J, Huang, J. and Zhou, J., "The fundamental mechanism of Cavitation in pump system", Journal of Fluid Machinery, 1998, June.

#### Selected Grants/Awards:

1. Principal Investigator, Louisiana Board of Regents, "Enhancement of Chemical Engineering Instruction and Research", \$56,000, 2004 – 2005
2. Principal Investigator, Louisiana Board of Regents, "Enhancement of Computational Science Instruction and Research", \$59,500, 2006 – 2007